

## Title (en)

Method of making porous ceramic suitable as diesel particulate filters.

## Title (de)

Verfahren zur Herstellung poröser keramischer Materialien geeignet für Dieselpartikelfilter.

## Title (fr)

Procédé de fabrication de produits céramiques poreux à utiliser comme filtres de particules pour moteurs diesel.

## Publication

**EP 0549873 A1 19930707 (EN)**

## Application

**EP 92119242 A 19921111**

## Priority

US 81622692 A 19920103

## Abstract (en)

A method of making porous ceramic articles is disclosed that allows the formed green body to be dried in a dielectric oven without arcing or shorting occurring while maintaining favorable physical properties. The method includes adding water insoluble cellulose and graphite to the ceramic-forming precursors as a burnout material. The method of the present invention is particularly useful in forming porous cordierite articles that are extruded to form a honeycomb structure conventionally used as a particulate filter for the exhaust fluids of diesel engines. Such articles have a matrix of thin walls forming a multiplicity of open-ended cells extending from one end to another end of the honeycomb. The thin walls have a substantially smaller coefficient of thermal expansion in the direction parallel to the axes of the open-ended cells than in the direction transverse to the thin walls.

## IPC 1-7

**B01D 39/20**; **C04B 35/18**; **C04B 38/00**; **F01N 3/02**

## IPC 8 full level

**B01D 46/00** (2006.01); **B01D 46/24** (2006.01); **C04B 35/00** (2006.01); **C04B 35/195** (2006.01); **C04B 35/636** (2006.01); **C04B 38/00** (2006.01); **F01N 3/02** (2006.01); **F02B 3/06** (2006.01)

## CPC (source: EP KR US)

**B01D 46/0001** (2013.01 - EP KR US); **B01D 46/2418** (2013.01 - EP KR US); **B01D 46/2429** (2013.01 - KR); **B01D 46/24491** (2021.08 - KR); **B01D 46/24492** (2021.08 - KR); **B01D 46/24494** (2021.08 - KR); **B01D 46/247** (2013.01 - EP KR US); **B01D 46/2474** (2013.01 - KR); **B01D 46/2482** (2021.08 - KR); **B01D 46/2484** (2021.08 - KR); **C04B 35/195** (2013.01 - EP KR US); **C04B 35/6365** (2013.01 - EP KR US); **C04B 38/0006** (2013.01 - EP KR US); **F02B 3/06** (2013.01 - KR); **B01D 46/2429** (2013.01 - US); **B01D 46/24494** (2021.08 - EP US); **B01D 46/2474** (2013.01 - US); **B01D 46/2482** (2021.08 - EP US); **B01D 46/2484** (2021.08 - EP US); **F01N 2330/06** (2013.01 - EP KR US); **F02B 3/06** (2013.01 - EP US); **Y10S 264/48** (2013.01 - EP KR US)

## Citation (search report)

- [Y] EP 0362400 A1 19900411 - NGK INSULATORS LTD [JP]
- [Y] EP 0107345 A2 19840502 - CORNING GLASS WORKS [US]
- [A] EP 0450899 A2 19911009 - NGK INSULATORS LTD [JP]
- [A] EP 0278750 A1 19880817 - NGK INSULATORS LTD [JP]
- [A] SPRECHSAAL vol. 119, no. 12, December 1986, COBURG DE pages 1116 - 1119 I.M.LACHMAN 'Ceramic Honeycombs for Catalysis and Industrial Applications'
- [A] CHEMICAL ABSTRACTS, vol. 111, no. 14, 2 October 1989, Columbus, Ohio, US; abstract no. 119824x,
- [A] CHEMICAL ABSTRACTS, vol. 113, no. 2, 9 July 1990, Columbus, Ohio, US; abstract no. 10988u,

## Cited by

DE102007018816A1; BE1014235A3; EP1298112A4; DE10013366C1; BE1016189A5; EP0753490A1; EP1201620A4; EP1270531A4; US7156934B2; DE102007031854A1; WO0168558A1; US6753282B2

## Designated contracting state (EPC)

BE DE

## DOCDB simple family (publication)

**US 5183608 A 19930202**; DE 69201434 D1 19950323; DE 69201434 T2 19950914; EP 0549873 A1 19930707; EP 0549873 B1 19950215; JP H05330943 A 19931214; KR 930016376 A 19930826

## DOCDB simple family (application)

**US 81622692 A 19920103**; DE 69201434 T 19921111; EP 92119242 A 19921111; JP 34612092 A 19921225; KR 930000020 A 19930104